

Claim Amendments

1. (Currently amended) ~~In a~~ A method for evaluating measured data by ~~digitalizing said measured data in an~~ utilizing analog-to-digital converter conversion so as to obtain digitalized measured data ~~and from analog measured data~~, disseminating said digitalized measured data to a digital signal processor for processing said digitalized measured data by computation, and outputting respective measured values from the processor, the improvement comprising:

AI Cont. providing utilizing a shift register between said commonly connected outputs of a plurality of analog-to-digital converter converters and said digital signal processor,

intermediately storing said in said shift register digitalized measured data in said shift register produced by said converters from analog measured data until completion of the acquisition of all digitalized measured data to be processed simultaneously is acquired in the shift register,

reading out together in a block transfer from the shift register all digitalized measured data to be processed simultaneously, and

executing simultaneously processing of in said digital signal processor digitalized measured data by computation in said digital signal processor for obtaining read out from the shift register to obtain respective measured values.

2. (Currently amended) ~~In a~~ A device ~~to be used~~ for obtaining measured values by evaluating measured data, ~~and of the type including at least one~~ a plurality of analog-to-digital converter converters having a common output connection and configured to digitalize said analog measured data applied to the converters and a digital signal

PRANTL ET AL-Application No. 09/813,134

processor configured to simultaneously process said digitalized measured data upon digitalization by computing to obtain respective measured values, ~~the improvement comprising~~ and a shift register arranged between said ~~at least one~~ common output connection of the plurality of analog-to-digital converter converters and said digital signal processor ~~and~~ said register being configured to intermediately store said measured data upon digitalization until ~~completion of the acquisition of all~~ digitalized measured data to be processed simultaneously is acquired by the register for block transfer to the digital signal processor.

3. (Original) A device as set forth in claim 2, wherein said shift register is designed as a FIFO memory.

4. (Original) A method as set forth in claim 1, wherein said shift register is designed as a FIFO memory.
